

## Claims

- [c1] 1. A method for efficiently storing components of one or more composite graphic pages comprising the steps of:
- parsing a description of each of said composite pages and storing said parsed description;
  - opening one or more input files and uniquely identifying resources used on component pages described within that file;
  - copying said resources required by said component pages to an output file, and eliminating duplicate resources, such that each unique resources is copied to said output file only once;
  - creating said one or more composite graphic pages with references to said resources in said output file; and
  - copying said one or more composite graphic pages to said output file.
- [c2] 2. The method of claim 1 wherein said description of said composite pages are in the form of a compositing language.
- [c3] 3 The method of claim 2 wherein said compositing language is selected from a group comprising ASCII text, pdfExpress script, PPML and the Barco Book Ticket Language.
- [c4] 4 The method of claim 1 further comprising the step of copying resources unused by said one or more composite graphic pages to said output file.
- [c5] 5 The method of claim 1 further comprising the step of copying said description of each of said composite pages to said output file.
- [c6] 6. A method for creating a compressed PDF file containing one or more composite PDF pages comprising the steps of:
- parsing a description of each of said composite pages and storing said parsed description;
  - opening one or more input PDF files and uniquely identifying Cos objects used by PDF pages defined by PDF content streams within said one or more input PDF files; copying said Cos objects required by said composite pages to an output file, and eliminating duplicate Cos objects, such that

each unique Cos object is copied to said output file only once;  
creating a PDF content stream for said one or more composite graphic  
pages, based on said stored description, which includes references to said  
Cos objects in said output file; and  
copying said PDF content stream of said one or more composite graphic  
pages to said output file.

- [c7] 7 The method of claim 6 wherein said description of said composite pages are in the form of a compositing language.
- [c8] 8. The method of claim 7 wherein said compositing language is selected from a group comprising ASCII text, pdfExpress script, PPML and the Barco Book Ticket Language.
- [c9] 9. The method of claim 6 further comprising the step of copying Cos objects unused by said one or more composite graphic pages to said output file.
- [c10] 10. The method of claim 7 further comprising the step of copying said compositing language describing each of said composite pages to said output file.
- [c11] 11. The method of claim 6 further comprising the step of assigning unique identifiers to said Cos objects as they are copied to said output file.
- [c12] 12. The method of claim 11 wherein said PDF content stream for said one or more composite graphic pages is constructed as a Cos array-type object.
- [c13] 13. The method of claim 12 wherein said Cos array-type objects containing said PDF content streams reference said copied Cos objects using said unique identifiers.
- [c14] 14. The method of claim 6 further wherein said composite graphic pages comprise a base page and zero or more overlaid pages.
- [c15] 15. The method of claim 14 wherein a PDF rotation is applied to said base page.
- [c16] 16. The method of claim 15 wherein said zero or more overlaid pages are modified by a clipping function.

- [c17] 17. The method of claim 15 wherein said zero or more overlaid pages are modified by a two-dimensional matrix transformation.
- [c18] 18. The method of claim 15 wherein said zero or more overlaid pages are modified by a clipping function and a two-dimensional matrix transformation.
- [c19] 19. The method of claim 18 wherein said clipping function and said two-dimensional matrix are copied to said output file as part of said PDF content stream for said one or more composite graphic pages

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